

plasminogen activator. Tissue plasminogen activator can activate metalloproteinases which degrade the basement membrane of the endothelial cells. The loss of integrity of the basement membrane allows endothelial cells to migrate through the vessel wall and begin to form new vessels budding off the main channel.

In summary, this is a comprehensive overview of recent insights into mechanisms underpinning the mechanotransduction of hemodynamic forces by the vessel wall. The only significant criticism is that new insights derived from electrophysiologic and molecular studies have received little attention in this textbook. New contributions to the field will likely be derived from investigators in these fields. Nevertheless, this book provides the reader with an in-depth review of the physiologic studies that have contributed to our understanding of the mechanisms of mechanotransduction in the circulation.

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#### **Working with insurance and managed care plans: A guide for getting paid**

Jan Davison, Maxine Lewis. New York, 1995, McGraw-Hill, 448 pages, \$39.95.

This book, aimed at the needs of medical office personnel, provides an introduction to current methods of reimbursement and the record keeping and billing practice they require. The contents are divided between two broad topics: the mechanics of billing and collecting, and an analysis of different forms of medical insurance. The first seven chapters provide extensive details on billing, with special attention to using the universal claim form. There are long chapters on diagnosis coding (ICD-9) and procedure coding (CPT), which provide good explanations of these topics. These sections would be a good introduction for any physician who is not clear about these topics. Most of the balance of the book describes different health care programs, including Medicare, Medicaid, private insurance programs, and the new directions in managed care. The emphasis is on the aspects of the programs related to filing claims and reimbursement policies. The chapter on Medicare provides a detailed account of calculation of reimbursement under RBRVS.

The main focus throughout the book is on how to prepare the paperwork to maximize reimbursement for the services provided while reducing to a minimum the frequency of rejected claims. Sample forms and examples from references such as the CPT and ICD-9 codes are extensively used. Part of the book is dedicated to aspects of office practices and record keeping beyond the actual preparation of claims. Numerous samples of office forms, sample letters, and patient materials are aimed at developing good record-keeping practices, which are increasingly important in this era of denied claims and postpayment audits. As an aid to

learning, each chapter concludes with exercise section covering the concepts and data covered.

This book should provide a useful introduction to medical office staff who are going to be involved in claims preparation or any related record keeping. It may also be helpful reading for staffs of offices that have trouble with billing, especially if they have a high rate of denied claims. On the other hand, I do not consider this useful to the typical vascular surgeon either entering private practice after training or in an established practice. In this day and age the typical surgery resident has been exposed to the importance of documentation, the vagaries of reimbursement, and the use of coding systems. Most go into established practices. This book would be recommended as an overview for the occasional surgeon going into solo practice, for it will help him understand the importance of attention to well-established office practices.

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#### **L'Etoile du Nord: An account of Owen Harding Wangensteen**

Leonard Peltier, J. Bradley Aust. Chicago, 1994, American College of Surgeons, 158 pages, \$20.

*L'Etoile du Nord* was produced by two authors, Leonard F. Peltier, MD, PhD, and J. Bradley Aust, MD, PhD, as a brief—very brief—account of the accomplishments of a truly remarkable surgeon, Owen H. Wangensteen. Both authors are former students of Dr. Wangensteen, as is this reviewer. We are also aware that a more detailed biography has been “in the works” for some time. The authors believed, however, that some recording of the life and influence of Dr. Wangensteen should be published now “so that he can be measured against his contemporaries, many of whose biographies are already in print.” They have accomplished their stated goal in an interesting manner, frequently using Dr. Wangensteen’s own published words to describe the situation and his role in it.

The first three chapters are about Dr. Wangensteen’s early years and his education through medical school and surgical residency. Those chapters make two important points about Dr. Wangensteen. He was a voracious reader and relied heavily on the written word. He excelled in medical school, graduating first in his class. His surgical residency was unusual in that he spent a year with an internist, George E. Fahr, which he found to be a “wonderful opportunity.” In 1923-24 Dr. Wangensteen was sent to the Mayo Clinic for a year of study. He seized on it as an opportunity to observe the premier physicians in the country and, as usual, he made the most of it, befriending William J. Mayo in the process.

The fourth chapter is about Dr. Wangensteen’s travels in Europe, which had an enormous influence on his surgical thinking, particularly about resident education, taking clinical problems to the laboratory for investigation, and a

tendency to be more radical in surgical disease. Chapter five is a delightful account of the so-called "kindergarten cabal" against Dr. Wangenstein, who had been named the Chairman of the Department of Surgery at the young age of 32 years. Chapters six through nine detail his enormous influence in the areas of intestinal obstruction, cancer, and peptic ulcer disease.

Chapters ten, eleven, and twelve are devoted to the Minnesota program, the education of a surgeon, and the history of medicine, all of which are very important parts of Dr. Wangenstein's approach to education. As he often said, "The teacher who succeeds in instilling a love and lust for learning in his students projects his influence to unborn generations," and "my only parting reminder to teachers is that young men are eager and keen to learn. So ardent in their desire to make their own contribution to the patrimony of knowledge, that all the teacher needs to do is provide them with the opportunity and not stand in their way. . . ."

The final chapters describe Dr. Wangenstein's role in the establishment of the surgical forum at the Clinical Congress of the American Board of Surgeons. This idea came from Dr. Wangenstein's abiding conviction that surgeons, particularly academic surgeons, had to have proper laboratory experience to become a complete surgeon. While the emphasis on the animal laboratory in Dr. Wangenstein's program may have been too great, there can be no argument that the modern day surgeon needs a sound fundamental background in science to practice effectively. As stated in the epilogue in Dr. Wangenstein's own words: "My role has been essentially that of focusing the sunshine of encouragement upon the efforts of my colleagues. In the lively leaven of an atmosphere fostering inquiry, no one was afraid to come forward with a novel idea, no matter how strange or unfamiliar it may have sounded. In the crucible of experiment and with friendly doubting Thomases looking on, the new idea could be given the acid test. The stages of a new idea are multiple. Many are stillborn. But every new suggestion deserves at least a trial of being blown upon the hope there may be sparks in the ashes."

The book has captured Dr. Wangenstein's essence and aptly describes him as L'Etoile du Nord (the star of the north) which is the motto of his home state, Minnesota.

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### **Carotid endarterectomy: Principles and techniques**

Christopher Loftus. St. Louis, 1995, Quality Medical Publishing, Inc., 242 pages, \$130.

*Carotid endarterectomy: Principles and techniques* is a monograph by a noted neurosurgeon. The initial chapter, which details indications for operation and basics concerning the surgical technique, is well-written and contains 248 references. Nonetheless, it is not all-encompassing. Carotid ultrasound is mentioned in passing, undoubtedly reflecting the author's dependence on angiography. Transcranial Doppler and electroencephalography are covered more completely. The author's approach to patients with intraluminal thrombus and postoperative deficits runs counter to the dogma expressed in most medical centers. The introductory chapter is followed by a series of radiographic studies and clinical vignettes that emphasize the author's approach to many clinical problems.

The strength of this monograph is in the chapter emphasizing meticulous surgical technique. The photographs are, in general, excellent, and the line drawings that accompany them clear and unambiguous. The technique described is, by and large, standard with few exceptions. The shunt that is used is smaller than most. An inordinate emphasis is placed on external carotid endarterectomy. The arteriotomy is closed almost exclusively without patch. Nonetheless, the author claims a 2% morbidity and mortality rate and thus must be respected for his views.

This monograph would be more complete if it contained statistics concerning Dr. Loftus' operative experiences. His variations in philosophy and technique are sufficiently different from my own as to tweak my interest regarding his results. Whereas his results are referenced, this requires extra effort on the part of the reader that I believe is properly the responsibility of the author.

*Carotid endarterectomy: Principles and techniques* is a well-bound book with clear printing and excellent pictorial reproductions on high-grade glossy paper. Housestaff and beginning practitioners will enjoy this book by virtue of its excellent chapter on techniques. This monograph, like many that have preceded it, will be of interest, but unfortunately adds little to the knowledge of the experienced endarterectomist.

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